

WHAT IS CLAIMED IS:

1. A catheter comprising:
a sheath including a proximal region and a distal-end region;
a first steering tendon housed within the sheath, the first steering tendon having a
5 first end attached to the distal-end region at a point proximate an inner surface of the
sheath, and a second end located at the proximal region of the sheath, wherein movement
of the first steering tendon in a proximal direction causes the sheath distal-end region to
deflect; and
a second steering tendon housed within the sheath, the second steering tendon
10 having a first end attached to the distal-end region at a point proximate the inner surface of
the sheath, and a second end located at the proximal region of the sheath, wherein
movement of the second steering tendon in the proximal direction causes the sheath distal-
end region to deflect.
- 15 2. The catheter of claim 1 wherein the attachment point of the first steering
tendon is distal the attachment point of the second steering tendon.
3. The catheter of claim 1 wherein the attachment point of the first steering
tendon and the attachment point of the second steering tendon are axially aligned.
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4. The catheter of claim 1 wherein the attachment point of the first steering
tendon and the attachment point of the second steering tendon are angularly aligned with
each other.
- 25 5. The catheter of claim 1 wherein the attachment point of the first steering
tendon and the attachment point of the second steering tendon are angularly displaced from
each other.
6. The catheter of claim 5 wherein the angular displacement between
30 attachment points is approximately 90°.

7. The catheter of claim 5 wherein the angular displacement between attachment points is approximately 180°.

8. A catheter comprising:

5 a sheath including a proximal region and a distal-end region;

a first steering tendon housed within the sheath, the first steering tendon having a first end attached to the distal-end region at a point proximate an inner surface of the sheath, and a second end located at the proximal region of the sheath, wherein movement of the first steering tendon in a proximal direction causes the sheath distal-end region to deflect; and

10 a second steering tendon housed within the sheath, the second steering tendon having a first end attached to the distal-end region at a point proximate the inner surface of the sheath at a point proximal to the attachment point of the first steering tendon, and a second end located at the proximal region of the sheath, wherein movement of the second steering tendon in the proximal direction causes the sheath distal-end region to deflect.

9. The catheter of claim 8 further comprising:

a distal tip attached to the distal end of the distal-end region;
wherein the first steering tendon is secured within the distal tip.

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10. The catheter of claim 8 wherein the attachment point of the first steering tendon and the attachment point of the second steering tendon are angularly aligned with each other.

25 11. The catheter of claim 8 wherein the attachment point of the first steering tendon and the attachment point of the second steering tendon are angularly displaced from each other.

30 12. The catheter of claim 11 wherein the angular displacement between attachment points is approximately 90°.

13. The catheter of claim 12 wherein the angular displacement between attachment points is approximately 180°.

5 14. The catheter of claim 8 further comprising:
an anchor band positioned within the distal-end region, proximal the distal tip;
wherein the first end of the second steering tendon is attached to the anchor band.

10 15. The catheter of claim 14 wherein the first end of the second steering tendon is attached to the inner surface of the anchor band.

16. A catheter for use with biological tissue, the catheter comprising:
a sheath including a proximal region and a distal-end region;
at least one electrode located in the distal-end region for transferring energy to the biological tissue;
15 a first steering tendon housed within the sheath, the first steering tendon having a first end attached to the distal-end region at a point proximate an inner surface of the sheath, and a second end exiting a proximal end of the sheath, wherein movement of the first steering tendon in a proximal direction causes the sheath distal-end region to deflect;
and
20 a second steering tendon housed within the sheath, the second steering tendon having a first end attached to the distal-end region at a point proximate the inner surface of the sheath at a point proximal to the attachment point of the first steering tendon, and a second end exiting the proximal end of the sheath, wherein movement of the second steering tendon in the proximal direction causes the sheath distal-end region to deflect.

25 17. The catheter of claim 16 further comprising:
a distal tip attached to the distal end of the distal-end region;
wherein the first steering tendon is secured within the distal tip.

30 18. The catheter of claim 16 further comprising:
a distal tip electrode attached to the distal end of the distal-end region;
wherein the first steering tendon is secured within the distal tip electrode.

19. The catheter of claim 16 wherein the attachment point of the first steering tendon and the attachment point of the second steering tendon are angularly aligned with each other.

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20. The catheter of claim 16 wherein the attachment point of the first steering tendon and the attachment point of the second steering tendon are angularly displaced from each other.